AMENDMENT

In the Claims:

Please cancel claims 1-24 without prejudice or disclaimer. Please add new claims 25-54:

25. (New) A method of identifying a correlation between phenotype information and genotype information, which comprises:

selecting a phenotype characteristic;

identifying records from a database for individuals that comply with the selected phenotype characteristic, wherein the database comprises a plurality of records containing phenotype information, genotype information, and confounding information; and

taking account of the confounding information, determining if the presence of the selected phenotype characteristic is correlated with the presence of any genotype characteristic in the genotype information for records in the database.

26. (New) The method of claim 25, wherein the confounding information is selected from information selected from the group consisting of medication being taken by the individual, medical history, occupational information, information relating to the hobbies of the individual diet information, family history, normal exercise routines of the individual, age and sex.

27. (New) The method of claim 25, wherein the phenotype and confounding information is collected at the same time from the individual.

28. (New) The method of claim 25, wherein the phenotype information for the individual comprises at least one of and optionally all of osteoporosis related phenotypes, osteoarthritis related phenotypes, immune cell subtypes (such as Tcell subsets), metabolic syndrome/syndrome X related phenotypes, and hypertension related phenotypes.

29. (New) The method of claim 25, wherein the phenotype information comprises at least one of and optionally all of thrombosis/fibrinolysis phenotypes, haemoglobinopathy related phenotypes and airways disease (asthma) phenotypes

30. (New) The method of claim 25, wherein the phenotype information further comprises information relating to atopy/eczema, lung function, IgE, psoriasis, acne, skin cancer and moliness of skin.

31. (New) The method of claim 25, wherein the individuals are human individuals.

32. (New) The method of claim 25, wherein the genotype information comprises single nucleotide polymorphism information.

33. (New) The method of claim 25, wherein the genotype information is selected from the group consisting of actual or inferred nucleotide sequences at one or more regions within the genome; a record of variation between a specified sequence on a chromosome of the individual compared to a reference sequence; and the length of a particular sequence or a particular sequence variant.

A1 cont

34. (New) The method of claim 25, wherein the database comprises records having information corresponding to twins.

35. (New) The method of claim 34, wherein the genotype information comprises zygosity information.

36. (New) The method of claim 25, wherein the plurality of records in the database contain information relating to the location of a sample of tissue or fluid from an individual.

37. (New) The method of claim 36, wherein the sample of tissue or of fluid is selected from the group consisting of urine, serum, skin, liver, heart, bone, hair, muscle, kidney, tooth, saliva, faeces and DNA.

38. (New) The method of claim 36, wherein the sample information comprises the geographical location of the sample, the storage conditions of the sample and the storage reference number for reference label of the sample.

39. (New) The method of claim 36, wherein the sample information comprises contact information enabling the individual to be contacted and retested in person.

40. (New) A method for correlating genotype and phenotype information with account taken of potential or actual confounding information, which comprises use of a database comprising a plurality of records containing phenotype information, genotype information, and confounding information.

41. (New) The method of claim 40, wherein the confounding information is selected from information selected from the group consisting of medication being taken by the individual, medical history, occupational information, information relating to the hobbies of the individual diet information, family history, normal exercise routines of the individual, age and sex.

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42. (New) The method of claim 40, wherein the phenotype and confounding information is collected at the same time from the individual.

43. (New) The method of claim 40, wherein the phenotype information for the individual comprises at least one of and optionally all of osteoporosis related phenotypes, osteoarthritis related phenotypes, immune cell subtypes (such as Tcell subsets), metabolic syndrome/syndrome X related phenotypes, and hypertension related phenotypes.

44. (New) The method of claim 40, wherein the phenotype information comprises at least one of and optionally all of thrombosis/fibrinolysis phenotypes, haemoglobinopathy related phenotypes and airways disease (asthma) phenotype.

45. (New) The method of claim 40, wherein the phenotype information further comprises information relating to atopy/eczema, lung function, IgE, psoriasis, acne, skin cancer and moliness of skin.

46. (New) The method of claim 40, wherein the individuals are human individuals.

47. (New) The method of claim 40, wherein the genotype information comprises single nucleotide polymorphism information.

48. (New) The method of claim 40, wherein the genotype information is selected from the group consisting of actual or inferred nucleotide sequences at one or more regions within the genome; a record of variation between a specified sequence on a chromosome of the individual compared to a reference sequence; and the length of a particular sequence or a particular sequence variant.

A1 cont

49. (New) The method of claim 40, wherein the database comprises records having information corresponding to twin individuals.

50. (New) The method of claim 49, wherein the genotype information comprises zygosity information.

51. (New) The method of claim 25, wherein the plurality of records in the database contain information relating to the location of a sample of tissue or fluid from an individual.

52. (New) The method of claim 51, wherein the sample of tissue or of fluid is selected from the group consisting of urine, serum, skin, liver, heart, bone, hair, muscle, kidney, tooth, saliva, faeces and DNA

53. (New) The method of claim 51, wherein the phenotype information comprises at least one of and optionally all of thrombosis/fibrinolysis phenotypes, haemoglobinopathy related phenotypes and airways disease (asthma) phenotype.

54. (New) The method of claim 51, wherein the sample information comprises contact information enabling the individual to be contacted and retested in person.